

INSTALL EMERGENCY GENERATOR LANGSFORD HOUSE YOUTH CENTER Lee's Summit, MO

HENDERSON
ENGINEERS
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MO. CORPORATE NO. E-556D
EXPIRES 10/31/2024

SHEET LIST

GENERAL
G000 COVER SHEET
ELECTRICAL
E000 ELECTRICAL GENERAL NOTES AND LEGEND
E100 ELECTRICAL SITE PLAN
PLUMBING
P100 PLUMBING SITE PLAN

OWNER: STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

PROJECT
MANAGEMENT: OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION



DESIGNER: HENDERSON ENGINEERS

PROJECT NUMBER: H2303-01

SITE NUMBER: 7717
FACILITY NUMBER: 8877717001

SHEET NUMBER:

G-000
1 OF 4 SHEETS

ELECTRICAL SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED.

Table with columns: ABBREVIATIONS, MFR, MIN, MLO, MLV, MOCBP, etc. listing various electrical symbols and their manufacturer/minimum values.

Table with columns: ANNOTATION, MECHANICAL OR FIRE PROTECTION PLAN NOTE CALLOUT, PLUMBING PLAN NOTE CALLOUT, etc.

Table with columns: POWER EQUIPMENT, ELECTRICAL PANELBOARD (SURFACE OR FLUSH MOUNT), ELECTRICAL CABINET, etc.

Table with columns: ELECTRICAL ONE-LINE & RISER DIAGRAM, SWITCH (RATING AND POLES AS INDICATED), DRAWOUT CIRCUIT BREAKER, etc.

ELECTRICAL DEMOLITION GENERAL NOTES:

- 1. AVOID DAMAGING FACILITIES, INCLUDING EQUIPMENT, LIGHT FIXTURES AND DEVICES THAT ARE EXISTING TO REMAIN, NEW OR REUSED. REPAIR ALL DAMAGE CAUSED DURING WORK AT NO EXTRA COST TO THE OWNER.
2. WHERE ALTERATION OF ELECTRICAL EQUIPMENT, LIGHTING FIXTURES, RACEWAYS OR WIRING DEVICES AFFECTS EXISTING SURFACES/FINISHES: REPAIR/PAINT AFFECTED SURFACE TO MATCH EXISTING ADJACENT SURFACE IN ACCORDANCE WITH OWNER REQUIREMENTS. MAINTAIN FIRE RATING OF ALL FLOORS/WALLS/CEILING THAT ARE RATED.
3. WHERE DEMOLITION WORK INTERRUPTS ELECTRICAL CONTINUITY OF CIRCUITS THAT ARE TO REMAIN IN USE, PROVIDE NECESSARY DEVICES AND RELATED CIRCUITRY TO MAINTAIN ELECTRICAL CONTINUITY IN ACCORDANCE WITH OWNER REQUIREMENTS. RE-CIRCUIT REUSED ELECTRICAL EQUIPMENT, LIGHT FIXTURES AND WIRING DEVICES PREVIOUSLY POWERED FROM DEMOLISHED EQUIPMENT TO NEW OR TEMPORARY EQUIPMENT AS NEEDED.
4. COORDINATE DISCONNECTION OF POWER TO EQUIPMENT BEING DEMOLISHED/REMOVED/RELOCATED WITH OTHER TRADES PRIOR TO START OF WORK. ALL ELECTRICAL EQUIPMENT, LIGHT FIXTURES, RACEWAYS, WIRING DEVICES AND RELATED CIRCUITRY NOT BEING REUSED SHALL BE REMOVED IN ALL ACCESSIBLE AREAS AND IN FLOORS/WALLS/CEILING THAT ARE TO BE REMOVED, UNLESS NOTED OTHERWISE BY OWNER. UNUSED ELECTRICAL EQUIPMENT, RACEWAYS AND RELATED CIRCUITRY THAT ARE INACCESSIBLE MAY BE ABANDONED IN PLACE AND SHALL BE PERMANENTLY DISCONNECTED FROM ALL POWER SOURCES, INSULATED FROM CONTACT WITH OTHER LIVE ELECTRICAL WIRING/DEVICES, AND IDENTIFIED AT THE TERMINATIONS AS NO LONGER BEING IN SERVICE.
5. LOW VOLTAGE CABLES/WIRING NOT BEING REUSED SHALL BE REMOVED UNLESS IDENTIFIED FOR FUTURE USE. COORDINATE REQUIREMENTS WITH OWNER. CARE SHOULD BE TAKEN DURING THE REMOVAL PROCESS TO PROTECT THE EXISTING REUSED CABLES/WIRING FROM DAMAGE.

APPLICABLE ELECTRICAL CODES:

NOTE: PROJECT IS DESIGNED IN COMPLIANCE WITH THE FOLLOWING CODES. THIS IS NOT AN EXHAUSTIVE LIST. PROJECT SHALL COMPLY WITH ALL APPLICABLE CODES, STANDARDS AND LOCAL REQUIREMENTS. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
ELECTRICAL CODE: 2023 NATIONAL ELECTRICAL CODE. (NFPA 70)
BUILDING CODE: 2021 INTERNATIONAL BUILDING CODE
ENERGY CODE: 2021 INTERNATIONAL ENERGY CONSERVATION CODE

ELECTRICAL GENERAL NOTES:

- 1. EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS AND SITE VISITS AND MAY NOT REFLECT ACTUAL "AS-BUILT" CONDITIONS. VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BID. COORDINATE NEW AND DEMOLITION WORK WITH ALL OTHER TRADES AND EXISTING CONDITIONS.
2. NOTIFY ARCHITECT, ENGINEER AND OWNER, AS APPLICABLE, IF ANY DANGEROUS CONDITIONS EXIST ON JOB SITE BEFORE ANY DEMOLITION OR REMODEL WORK BEGINS.
3. COORDINATE ANY NECESSARY POWER OUTAGES WITH THE OWNER. REQUESTS FOR ELECTRICAL SHUTDOWNS OF THE OWNER'S EQUIPMENT SHALL BE BROUGHT IN WRITING TO THE ATTENTION OF THE OWNER AT LEAST 7 DAYS IN ADVANCE.

ELECTRICAL SUPPLEMENTAL SPECIFICATIONS:

- 1. PRIOR TO SUBMITTING BID, VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS INCLUDING THE EXISTING UNDERGROUND UTILITIES ENTERING THE BUILDING WITHIN THE AREA OF WORK. AS APPLICABLE, REVIEW THE OWNER CRITERIA, GENERAL NOTES, OTHER TRADE DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO SUBMITTING BID.
2. ALL WORK SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES AS WELL AS APPLICABLE INDUSTRY STANDARDS. ALL EQUIPMENT SHALL BEAR LABELS FOR THE USE INTENDED BY AN AHJ ACCEPTED NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL), SUCH AS UL OR ETL. THE FINAL ELECTRICAL INSTALLATION OF THE FACILITY OCCUPIED BY OWNER SHALL BE FREE FROM ELECTRICAL DEFECTS TO THE SATISFACTION OF THE AHJ, OWNER, AND ENGINEER.
3. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC/SCHEMATIC IN NATURE AND REPRESENT THE GENERAL SCOPE OF WORK. IT IS NOT WITHIN THE SCOPE OF THE ELECTRICAL DRAWINGS TO SHOW ALL NECESSARY RACEWAY ROUTING, BENDS, OFFSETS, PULL BOXES AND OBSTRUCTIONS. CONTRACTOR SHALL COORDINATE THE FINAL LOCATION OF EQUIPMENT AND INSTALL ALL WORK TO CONFORM TO THE OWNER REQUIREMENTS.
4. ALL CONDUCTOR AND CONDUIT LENGTHS SHOWN IN THESE DESIGN DOCUMENTS ARE INTENDED SOLELY FOR USE IN THE DESIGN CALCULATIONS BY THE DESIGN PROFESSIONAL. UNLESS NOTED OTHERWISE, LENGTHS SHOWN SHALL NOT BE USED TO ASSIST IN THE BIDDING TAKEOFF PROCESS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MATERIAL QUANTITIES REQUIRED TO BID AND CONSTRUCT THE COMPLETE PROJECT.
5. ALL APPLICABLE SWITCHES, RECEPTACLES, OUTLETS, AND CONTROLS SHALL BE PLACED AT HEIGHTS THAT ARE IN ACCORDANCE WITH ADA ACCESSIBILITY GUIDELINES.
6. FLEXIBLE CONDUIT IS ONLY PERMITTED WHERE SPECIFICALLY ALLOWED IN THE CONSTRUCTION DOCUMENTS, WHERE CONCEALED FROM VIEW OR EXPOSED FINAL CONNECTIONS TO LIGHT FIXTURES AND EQUIPMENT IN LENGTHS OF 6'-0" OR LESS.
7. EXPOSED CONDUIT/RACEWAY SHALL BE PAINTED TO MATCH ADJACENT SURFACE, UNLESS NOTED OTHERWISE. COORDINATE REQUIREMENTS WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.
8. WHERE PRACTICABLE, ALL UNDER-FLOOR/UNDER-GROUND CONDUITS/RACEWAY SHALL BE INSTALLED A MINIMUM OF 24" BELOW BOTTOM OF SLAB/PAVING/GRADE, UNLESS NOTED OTHERWISE. NOTE: THE DESIGN INTENT FOR INSTALLING ELECTRICAL CIRCUITRY AT THIS DEPTH IS TO PROTECT THE ELECTRICAL CIRCUITRY FROM DAMAGE DUE TO FUTURE WORK.
9. PROVIDE INSULATED EQUIPMENT GROUNDING CONDUCTOR FOR ALL CIRCUITS, UNLESS NOTED OTHERWISE.

LINETYPE LEGEND

THROUGHOUT THE DRAWINGS DIFFERENT LINETYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASING DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.

Table showing linetypes for EXISTING, DEMOLISH, NEW, and FUTURE.

BRANCH CIRCUIT CONDUCTOR TABLE

Table with columns: # OF POLES, HOT (PHASE), NEUTRAL, (GROUNDED), "GROUNDING". Includes notes on conductor requirements and grounding.

HATCHING LEGEND

Table showing hatch patterns for ENLARGED PLAN and NOT IN SCOPE (NIS).

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INSTALL EMERGENCY GENERATOR - LANGSFORD HOUSE YOUTH CENTER

525 SE 2nd St. Lee's Summit, MO 64063

PROJECT # H2303-01
SITE # 7717
FACILITY # 8877717001

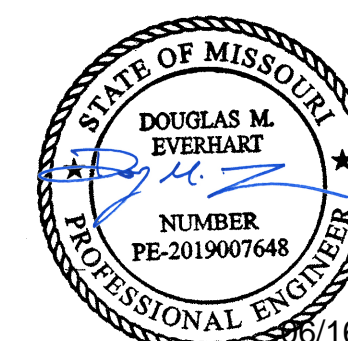
REVISION:
DATE:
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DATE:
REVISION:
DATE:
ISSUE DATE: 6/16/2023

CAD DWG FILE:
DRAWN BY: KS
CHECKED BY: HEI
DESIGNED BY: KS

SHEET TITLE: ELECTRICAL GENERAL NOTES AND LEGEND

SHEET NUMBER:

E000



DOUGLAS M. EVERHART
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GENERATOR - LANGSFORD
HOUSE YOUTH CENTER

525 SE 2nd St.
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DATE: _____
ISSUE DATE: 6/16/2023

CAD DWG FILE:
DRAWN BY: KS
CHECKED BY: NS
DESIGNED BY: KS

SHEET TITLE:
ELECTRICAL SITE
PLAN

SHEET NUMBER:
E100
3 OF 4 SHEETS
6/16/2023

ELECTRICAL PLAN NOTES:

- E1 RELOCATE EXISTING PANELBOARDS (ROTATE 180 DEGREES) TO BE ACCESSIBLE FROM EXTERIOR CLOSET. RECONNECT EXISTING FEEDER(S), BRANCH CIRCUITRY, AND GROUNDING AS REQUIRED. UTILIZE EXISTING TO MAXIMUM EXTENT POSSIBLE. PROVIDE NEW WHERE REQUIRED. PROVIDE NEW DRYWALL, PATCH AND MUD WHERE PANELBOARDS WERE REMOVED WITHIN CLOSET. REPAIR WALL TO OWNER SATISFACTION. PAINT WALL TO MATCH SURROUNDING WALL COLOR. REFER TO SPECIFICATION 260010 FOR ADDITIONAL INFORMATION.
- E2 CONTRACTOR SHALL PROVIDE A 6'-0" TALL GALVANIZED STEEL CHAIN LINK FENCE AROUND THE GENERATOR CONCRETE PAD. FENCE POSTS SHALL BE INSTALLED AT A MAXIMUM SPACING OF 8 FEET AND SHALL BE SECURELY ANCHORED IN CONCRETE FOOTINGS. INSTALL PER MANUFACTURER'S INSTRUCTIONS. FENCE SHALL HAVE A 6'-0" WIDE LOCKABLE GATE FOR ACCESS TO THE GENERATOR. COORDINATE FINAL FENCE SELECTION AND OPTIONS WITH OWNER PRIOR TO ORDERING. MAINTAIN 4'-0" CLEARANCE AROUND ALL SIDES OF GENERATOR FOR ACCESS AND MAINTENANCE.
- E3 EXISTING NEUTRAL-GROUND BONDS WITHIN PANEL SHALL BE BROKEN AND RE-CONNECTED TO NEUTRAL-GROUND BOND LOCATION WITHIN NEW SERVICE ENTRANCE RATED ATS.

SITE ELECTRICAL GENERAL NOTES:

- 1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. COORDINATE THE FINAL LOCATION OF ALL UNDERGROUND UTILITIES, CONDUITS, AND CIRCUITRY WITH OWNER AND OTHER TRADES PRIOR TO INSTALLATION.
- 2. COORDINATE ALL SITE ELECTRICAL REQUIREMENTS WITH EQUIPMENT MANUFACTURER INFORMATION AND OTHER TRADES AND ADJUST ELECTRICAL PROVISIONS AS REQUIRED TO MEET REQUIREMENTS.
- 3. SITE ELECTRICAL CONDUITS SHALL BE 1" MINIMUM, UNLESS NOTED OTHERWISE. WHERE PRACTICABLE, ALL SITE ELECTRICAL CONDUITS SHALL BE INSTALLED A MINIMUM OF 24" BELOW GRADE, UNLESS NOTED OTHERWISE. COORDINATE FINAL CONDUIT ROUTING WITH EXISTING OBSTRUCTIONS AND OTHER TRADES AND ADJUST AS NECESSARY.

ONE-LINE DIAGRAM GENERAL NOTES:

- 1. FEEDER SIZES ARE BASED ON COPPER (CU) THN/THWN-2 INSULATION, UNLESS NOTED OTHERWISE. CONDUIT SIZES ARE APPROPRIATE FOR SCHEDULE 40 PVC, EMT, GRS, IMC AND RMC. ADJUST SIZE AS NEEDED FOR OTHER RACEWAY TYPES. ALL CONDUCTOR SIZES ARE BASED ON 75 DEG C RATED TERMINATIONS, UNLESS NOTED OTHERWISE. FOR ANY OTHER CONDITIONS MODIFY SIZES PER CODE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 2. INSTALL FEEDERS OVERHEAD AS HIGH AS PRACTICABLE AND ORTHOGONALLY ALONG BUILDING STRUCTURE, UNLESS NOTED OTHERWISE. COORDINATE FINAL ROUTING WITH OTHER TRADES.
- 3. VERIFY THE INTEGRITY OF THE EXISTING GROUNDING ELECTRODE SYSTEM AND THAT THE NEUTRAL AND GROUND ARE PROPERLY BONDED TOGETHER AT THE POINT OF SERVICE ENTRANCE. NOTIFY THE OWNER AND THE ENGINEER OF ANY EXISTING DEFICIENCIES.

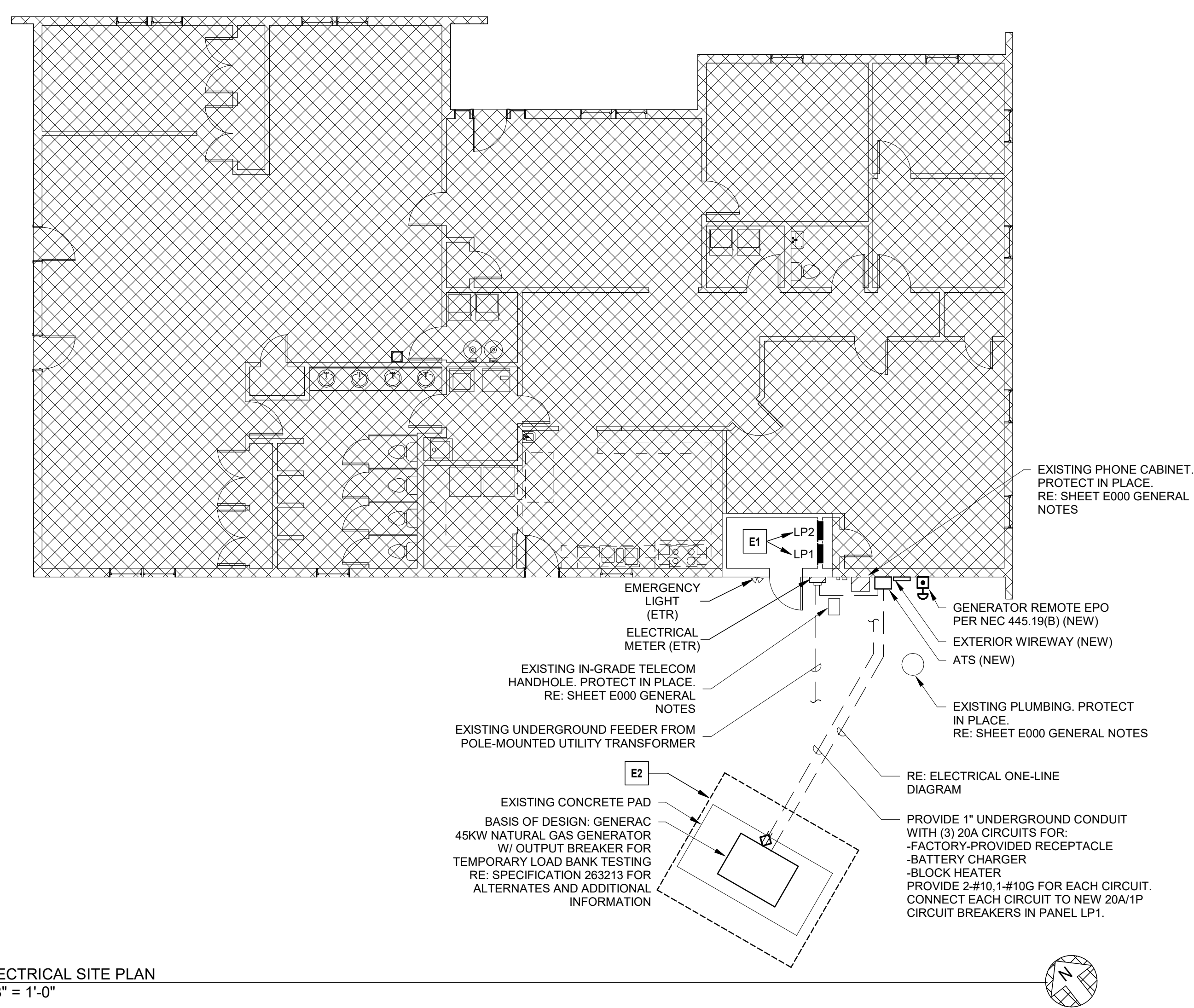
ELECTRICAL UTILITY CONTACT NOTE:

UTILITY COMPANY: EVERGY
UTILITY CONTACT: JANET WADDELL
EMAIL: JANET.WADDELL@EVERGY.COM
METER #: 18 107 004
**CONTACT EVERGY NO LATER THAN 7 DAYS PRIOR TO OUTAGE
PEAK LOAD = 23KW IN JUNE 2022 PER EVERGY UTILITY STATEMENTS

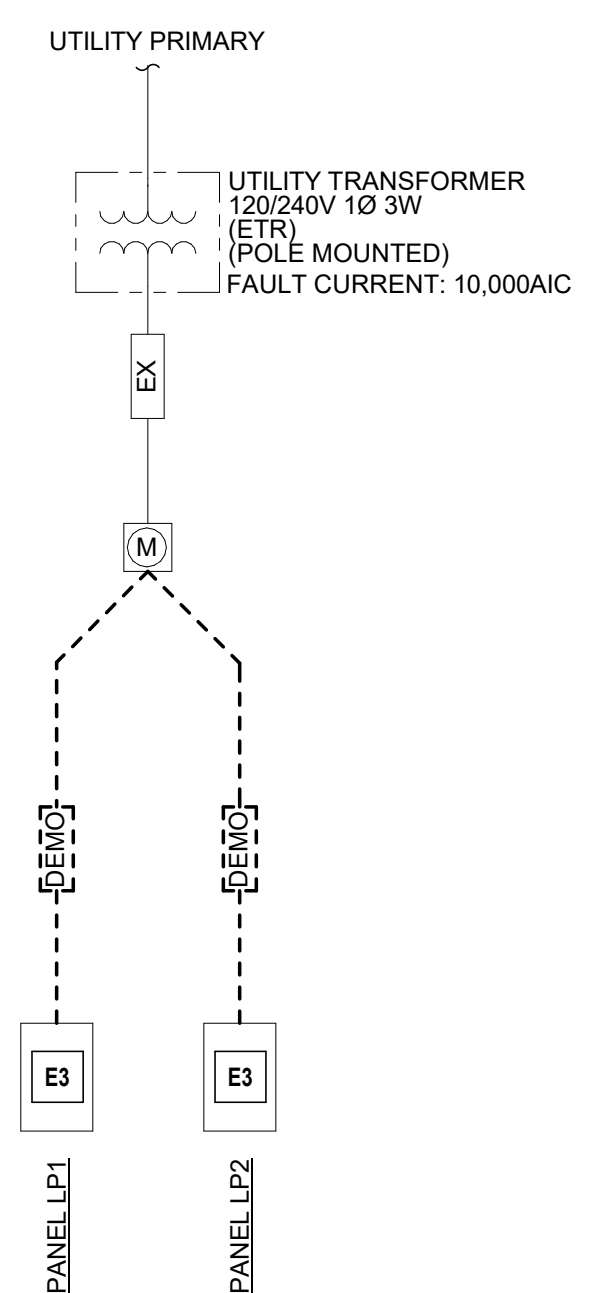
FEEDER SCHEDULE:

FEEDER TAG	FEEDER DESCRIPTION
203	(3)#3/0, (1)#6 G, 2" C
403A	(3)-500 kcmil, (1)#3 G, 3" C
DEMO	DEMOLISH FEEDER
EX	EXISTING FEEDER
G2	#2 COPPER GROUND, 3/4" C
G6	#6 COPPER GROUND, 3/4" C
G10	#1/0 COPPER GROUND, 3/4" C
MBJ	#2 MAIN BONDING JUMPER
5403A	(3)-500 kcmil, 3" C

1 ELECTRICAL SITE PLAN
1/8" = 1'-0"



4 ELECTRICAL ONE-LINE DIAGRAM - DEMOLITION
NTS



GENERATOR LOAD SCHEDULE

PROJECT NAME: LANGSFORD HOUSE YOUTH CENTER	
STREET ADDRESS: 525 SE 2ND ST.	
CITY, ST, ZIP: LEE'S SUMMIT, MO 64063	
STORE#:	
HENDERSON PROJECT #:	2250005581
PREPARED BY:	KYLE SVOBODA
LAST MODIFIED:	5/15/2023
GENERATOR TYPE:	STATIONARY
GENERATOR USAGE:	STANDBY
GENERATOR FUEL:	NATURAL GAS
FUEL TANK LOCATION:	SUB-BASE
OUTPUT VOLTAGE / HZ:	120/240V, 60HZ
GENERATOR LOCATION:	EXTERIOR GRADE
MAX AMBIENT AIR TEMP (°F):	104 F
ELEVATION AMSL (FT):	986'
MIN RUN-TIME W/ ON-SITE FUEL:	N/A
# OF GENSETS:	BASIS OF DESIGN IS FOR 1 GENSET

ATS #	LOAD STEP	PRIORITY	CODE CLASSIFIED LOAD TYPE			LOAD DESCRIPTION	PANELBOARDS / LOADS INCLUDED IN STEP (INCLUDES DOWNSTREAM LOADS AND SUBPANELS)	FULL LOAD (RUNNING KVA)										FULL LOAD (KVA)	NOTES (#)				
			NEC ARTICLE 700 EMERGENCY	NEC ARTICLE 701 LEGALLY REQUIRED STANDBY	NEC ARTICLE 702 OPTIONAL STANDBY			MAX INSTANTANEOUS VOLTAGE DIP (%)	MAX FREQUENCY DIP (%)	LIGHTING (LED)	COMPUTERS	INVERTER / UPS	FIRE PUMP (MOTOR)	ELEVATOR (MOTOR)	ELEC HEATING (RESISTIVE)	HVAC (MOTORS)	REFRIGERATION (MOTORS)			MISC MOTORS	KITCHEN EQUIPMENT	RECEPTACLES	MISC / OTHER
ATS-1	1	1.1			X	KITCHEN EQUIPMENT, HVAC, GENERAL PLUG-IN LOADS, LIGHTING	LP1, LP2	20	10													29	1,2,3
							MAXIMUM FULL LOAD (KVA):										29						

GENERAL NOTES:

A. THE INFORMATION PROVIDED IN THIS SCHEDULE IS PRELIMINARY AND SUBJECT TO CHANGE. IT IS PROVIDED TO ASSIST IN GENERATOR SIZING AND SELECTION. THIS INFORMATION NEITHER EXTENDS NOR ALTERS ANY CONTRACTUAL OBLIGATIONS OF THE ENGINEER OR CONTRACTOR. FINAL LOADS AND RELATED INFORMATION IN THIS SCHEDULE SHOULD BE VERIFIED BY THE CONTRACTOR AND IS SUBJECT TO THE REVIEW AND APPROVAL OF THE ENGINEER OF RECORD, AUTHORITY HAVING JURISDICTION AND OWNER, PRIOR TO IMPLEMENTATION. REFER TO ONE-LINE/RISER DIAGRAM FOR TRANSFER SWITCH AND GROUNDING INFORMATION. REFER TO RELATED CONSTRUCTION DOCUMENTS INCLUDING SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

B. UNLESS NOTED OTHERWISE, PER NEC, 700.4, 701.4 & 702.4, THE GENERATOR SYSTEM CAPACITY SHALL BE CALCULATED IN ACCORDANCE WITH NEC 220 OR OTHER APPROVED METHOD. NOTE THAT THE ACTUAL PEAK LOAD MAY BE SIGNIFICANTLY LESS THAN THIS CODE MINIMUM VALUE UNDER MOST CONDITIONS. IN ADDITION, THE LOADS SHOWN IN THIS SCHEDULE ARE BASED ON RUNNING FULL LOAD CURRENTS AT NOMINAL VOLTAGES AND DO NOT ACCOUNT FOR TEMPORARY STARTING IN-RUSH CURRENTS.

C. THE FINAL GENERATOR SIZING SHALL BE PERFORMED BY AN APPROVED GENERATOR MANUFACTURER OR REPRESENTATIVE AND SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ORDER. GENERATOR SUPPLIER SHALL BE RESPONSIBLE TO INCLUDE WITH GENERATOR PACKAGE ALL NECESSARY COMPONENTS, INCLUDING ALTERNATOR, BATTERY CHARGER, CONTROL PANEL, EMISSION/EXHAUST SYSTEM, ENCLOSURE, FUEL TANK GAUGES AND STARTER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS. GENERATOR SET AND RELATED COMPONENTS SHALL BE SUITABLE FOR LOCAL ELEVATION, ENVIRONMENT AND SEISMIC DESIGN CATEGORY. DE-RATE GENERATOR AND PROVIDE NECESSARY COMPONENTS AS NEEDED BASED ON AMBIENT TEMPERATURE, ELEVATION AND OTHER RELEVANT FACTORS.

D. IF TRANSIENT RESPONSE REQUIREMENTS CANNOT BE REASONABLY MET WITH AVAILABLE PRODUCT OFFERINGS THEN PROVIDE SUBMITTAL WITH BEST FIT FOR ENGINEER EVALUATION. REFER TO SPECIFICATIONS FOR ALLOWED STEADY-STATE TOLERANCES.

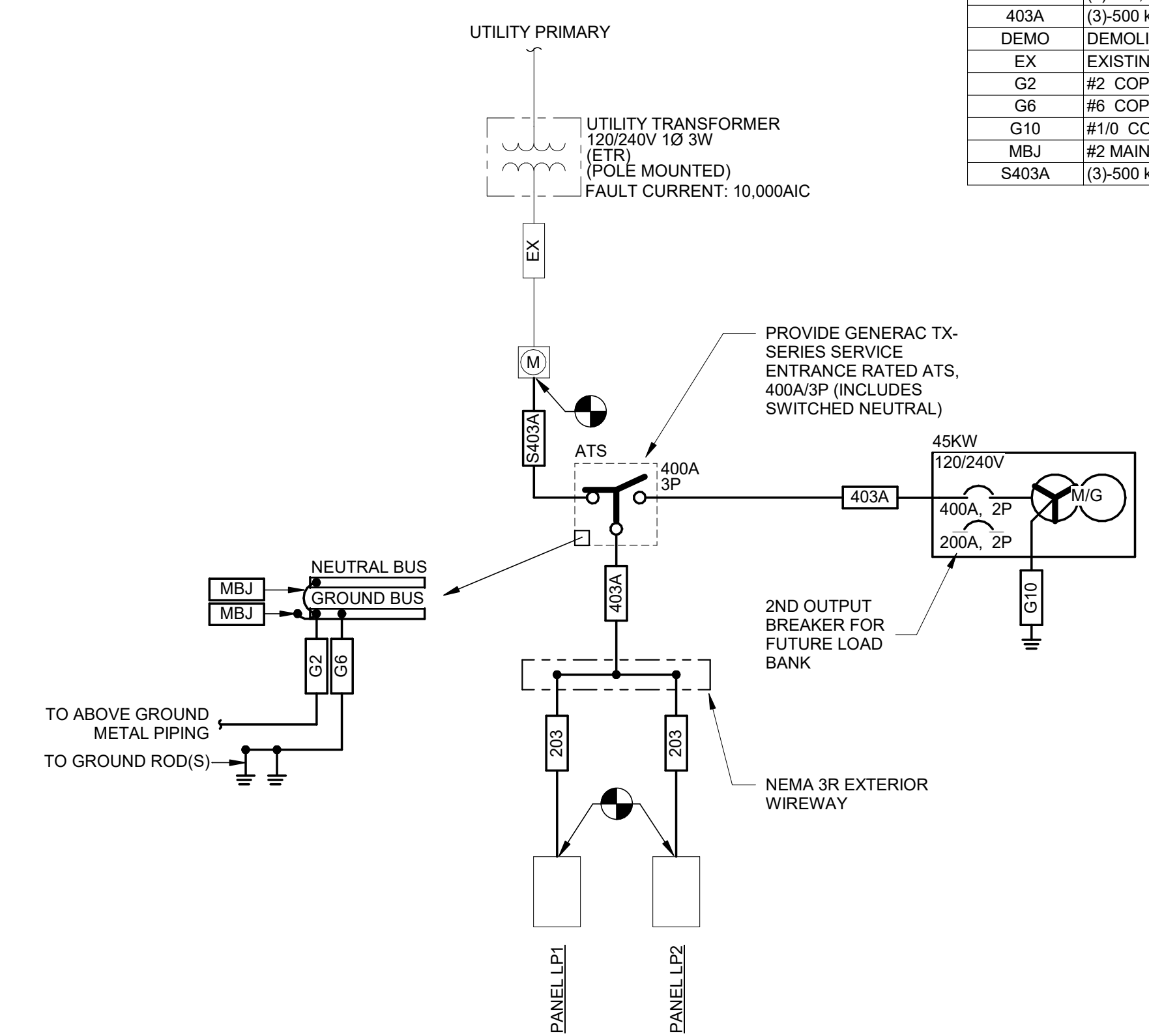
F. MAXIMUM RECOVERY TIME SHALL NOT EXCEED 3 SECONDS, UNLESS NOTED OTHERWISE.

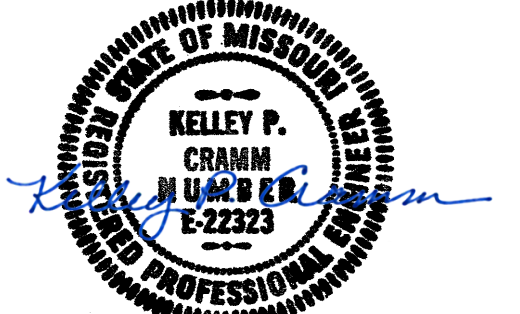
G. LOADS LISTED ABOVE ARE BASED ON A POWER FACTOR NO LESS THAN 0.80, UNLESS NOTED OTHERWISE.

NOTES:

- AS ALLOWED PER NEC 702.4, AN ACTIVE LOAD MANAGEMENT SYSTEM SHALL BE INSTALLED TO AUTOMATICALLY MANAGE THE CONNECTED LOAD. THE STANDBY SOURCE SHALL HAVE CAPACITY SUFFICIENT TO SUPPLY THE MAXIMUM LOAD THAT WILL BE CONNECTED. LOADS ON THIS STEP SHALL ONLY TRANSFER TO STANDBY SOURCE WHEN SUFFICIENT CAPACITY IS AVAILABLE.
- THE MAJORITY OF THIS LOAD IS NON-LINEAR.
- PROVIDE WEATHERPROOF SOUND-ATTENUATED ENCLOSURE TO LIMIT MAXIMUM OPERATIONAL SOUND OUTPUT TO 85 d(B)A AT 2' FROM ENCLOSURE.

5 ELECTRICAL ONE-LINE DIAGRAM - NEW
NTS

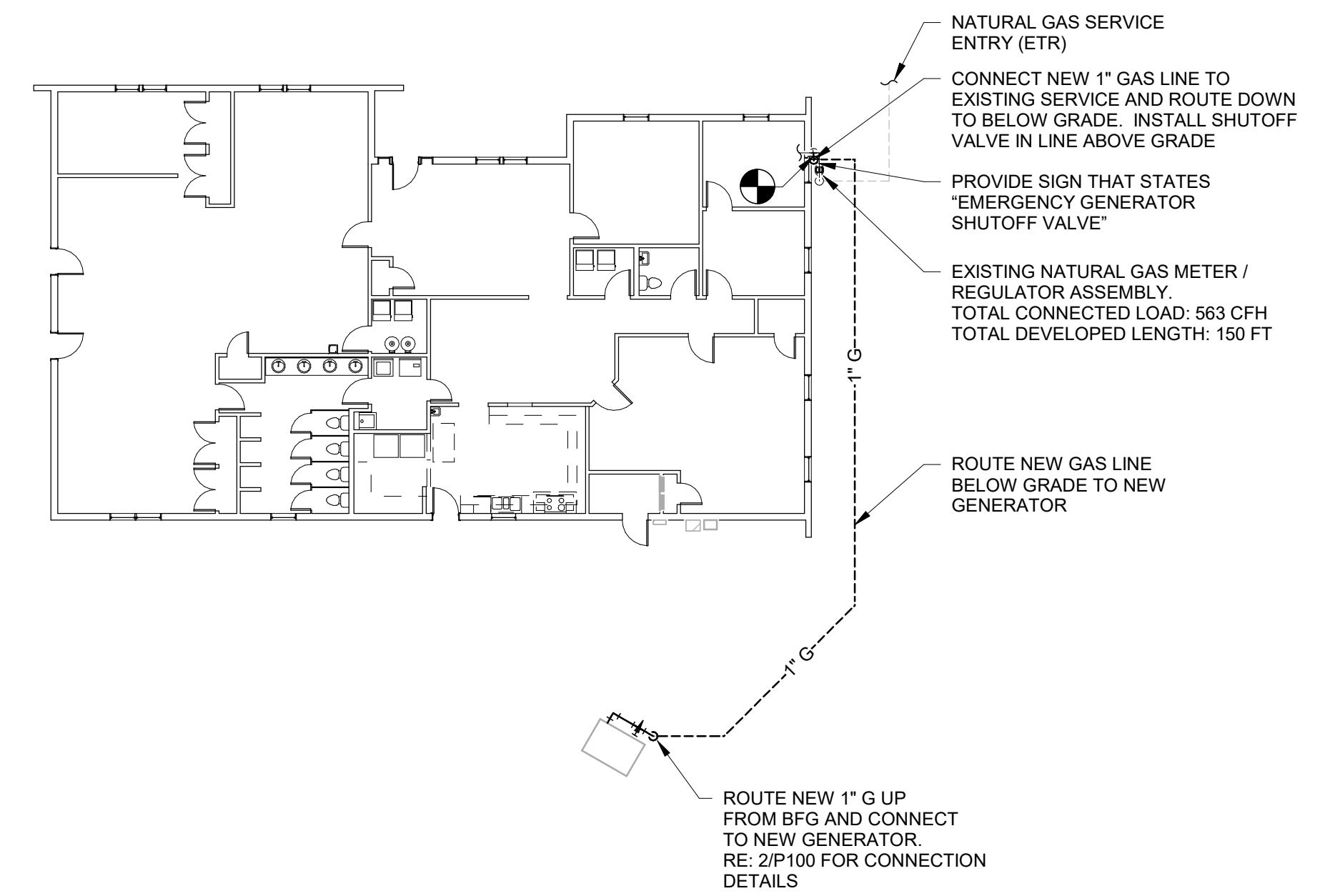




06/16/2023
KELLEY P. CRAMM
LICENSE # E-022323

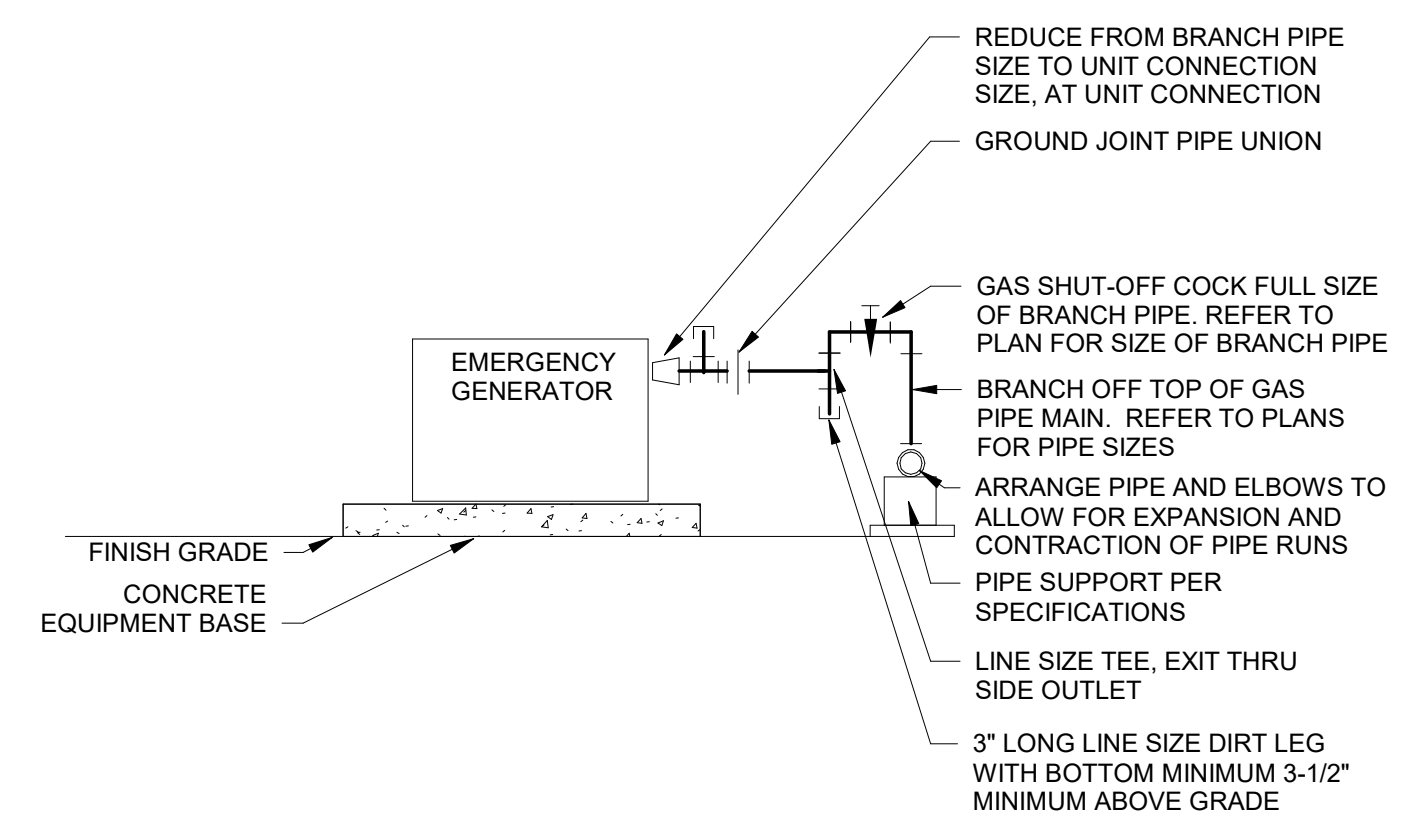
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<p>① PLUMBING PLAN NOTE CALLOUT</p> <p>1 PLUMBING EQUIPMENT DESIGNATION. (CONTRACTOR FURNISHED AND INSTALLED). REFER TO PLUMBING FIXTURE OR EQUIPMENT SCHEDULES</p> <p>1 EQUIPMENT DESIGNATION (OWNER FURNISHED, CONTRACTOR INSTALLED)</p> <p>CU 1 MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE)</p> <p>● CONNECTION POINT OF NEW WORK TO EXISTING</p> <p>1 P1 DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER</p> <p>1 P1 SECTION CUT DESIGNATION</p> <p>▣ DEDICATED EQUIPMENT ACCESS TILE</p> <p>▣ ACCESS PANEL</p>	<p>⊠ FLOOR SINK (FS), SIZE & TYPE</p> <p>⊡ FLOOR DRAIN (FD), SIZE & TYPE</p> <p>⊙ ROOF DRAIN (RD), SIZE & TYPE</p> <p>⊘ SHUTOFF VALVE</p> <p>⊘ CHECK VALVE</p> <p>⊘ STRAINER</p> <p>⊘ GAS PRESSURE REGULATOR</p> <p>⊘ CAP</p> <p>⊘ WALL CLEANOUT (WCO)</p> <p>⊘ FLOOR CLEANOUT (FCO)</p> <p>⊘ EXTERIOR CLEANOUT (ECO)</p> <p>⊘ ELBOW UP</p> <p>⊘ ELBOW DOWN</p> <p>⊘ TEE UP</p> <p>⊘ TEE DOWN</p> <p>⊘ GAS COCK</p>																																																																																														
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① PLUMBING SITE PLAN
1/16" = 1'-0"

TOTAL CONNECTED NATURAL GAS LOAD		
EQUIPMENT DESIGNATION	DESCRIPTION	CFH (EACH)
F-1	FURNACE (EXISTING)	66
F-2	FURNACE (EXISTING)	66
F-3	FURNACE (EXISTING)	44
F-4	FURNACE (EXISTING)	44
IWH-1	INSTANTANEOUS WATER HEATER (EXISTING)	160
IWH-2	INSTANTANEOUS WATER HEATER (EXISTING)	160
--	GENERATOR	23
TOTAL CONNECTED LOAD =		563
NATURAL GAS SYSTEM OPERATING PRESSURE:		7 IN. W.C.
NATURAL GAS SYSTEM SIZED WITH TOTAL DEVELOPED LENGTH FROM GAS METER TO MOST REMOTE PIECE OF EQUIPMENT:		150 FEET
SYSTEM DESIGN PRESSURE DROP:		0.5 IN. W.C.



PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. FOLLOW MANUFACTURER'S RECOMMENDATIONS FROM EQUIPMENT INSTALLATION MANUAL. INSTALL MUFFLER FURNISHED WITH GENERATOR SET. INSULATE EXHAUST PIPE IF REQUIRED.

② EMERGENCY GENERATOR CONNECTION
NTS

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

INSTALL EMERGENCY
GENERATOR - LANGSFORD
HOUSE YOUTH CENTER

525 SE 2nd St.
Lee's Summit, MO 64063

PROJECT # H2303-01
SITE # 7717
FACILITY # 8877717001

REVISION: _____
DATE: _____
REVISION: _____
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REVISION: _____
DATE: _____
ISSUE DATE: 6/16/2023

CAD DWG FILE:
DRAWN BY: ARE
CHECKED BY: HEI
DESIGNED BY: ARE

SHEET TITLE:
**PLUMBING SITE
PLAN**

SHEET NUMBER:
P100
4 OF 4 SHEETS
6/16/2023